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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,224	09/30/2003	Steffen Grun	VO-659	9882

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EXAMINER

BOLDEN, ELIZABETH A

ART UNIT PAPER NUMBER

1755

DATE MAILED: 12/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/675,224

Applicant(s)

GRUN ET AL.

Examiner

Elizabeth A. Bolden

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☒ Claim(s) 5, 10-13, 16, and 21-24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/5/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

The drawings are objected to because the graph's title and x-axis label are in German rather than English. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 4 March 2005 was considered by the examiner.

The information disclosure statement filed 5 March 2003 listed three Foreign Patent Publications which have been crossed out and not considered by the Examiner. The three Foreign Patent Publications DE 639456, JP 2002-66512, and JP 07-66512 have been placed in the application file, but the information referred to therein has not been considered. The German Patent, DE 639456, does not include an English language abstract, however the Applicants' refer

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to the patent in the disclosure. The Examiner was unable to locate an English language abstract for this patent and while reviewing the German Patent, specifically the figures it does not appear to be a patent direct towards a glass lamp but rather a piece of mechanical equipment. This is considered to be nonanalogous art and the Examiner is unsure of what patent the disclosure is referring to when it discusses the DE639456 patent.

As to the two Japanese Patent Publications, JP 2002-66512 and JP 07-66512, the Examiner has determined that there has possibly been an error in correctly identifying the Japanese Patent as discussed in the disclosure. JP 2002-66512 pertains to an organic material treating apparatus and JP 07-66512 pertains to a printed circuit board. Both of which are considered to be nonanalogous art. However, the Examiner believes that the correct Japanese Patent Publication number is JP 52-66512 A based on the Applicants' disclosure and the Derwent Abstract for JP 52-66512 A. The Examiner has cited the JP 52-66512 A publication and Derwent Abstract on the PTO-892. The Examiner recommends correcting the Japanese Patent Publication number in the specification on page 3, line 6.

Specification

A substitute specification in proper idiomatic English and in compliance with 37 CFR 1.52(a) and (b) is required. The substitute specification filed must be accompanied by a statement that it contains no new matter.

Throughout the entire disclosure including the claims there are several circumstance where it is unclear what being referred to. Here is a non-limiting list of examples where the specification is unclear and what the Examiner has used as the meaning during examination of this application.

1. Throughout the entire disclosure the phrase "edge situation" is used. It is unclear to the Examiner what is meant by "edge situation" or "steep edge situation". The Examiner believes that the Applicant is referring to the UV cutoff also know as the UV absorption edge. λ_c is generally represents the cutoff wavelength.

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2. On page 2, in the 4th and 5th paragraphs the disclosure recites “high transformation temperature” and “stable expansion coefficient” generally those terms are referred to as the glass transformation temperature and the thermal expansion coefficient.
3. Due to the phraseology of paragraph 5 on page 2 the Examiner is unclear what the disclosure is teaching.
4. On page 4, paragraph 3, the disclosure refers to “alkali earth metal oxides” it is unclear whether the disclosure means the alkali metal oxides: Na₂O, Li₂O, and K₂O or the alkaline earth metal oxides: MgO, CaO, BaO, and SrO.
5. Furthermore on page 7, CaO is referred to as an alkali earth oxide where it should be called an alkaline earth oxide.
6. In the last paragraph on page 7 the phrase “TiO₂ is required as an optional component” is unclear. If TiO₂ is required it cannot further be optional.
7. The first lines on page 8 read, “would increase the refractive index too greatly and reduce the Abbe number to greatly. This phrase is very confusing.
8. In the first sentence of page 9, it does not appear to have a proper verb.

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: In claims 3 and 14 the claims recite limitations on the amount of Mg and SrO permitted in the glass composition. However, nowhere in the specification portion of the disclosure does the instant invention refer to limitations on the Mg or SrO content of the glass. In the section of the specification discussing the prior art the mention of SrO and MgO content is discussed in reference to the prior art glasses only.

Claim Objections

Claims 5, 10-13, 16, and 21-24 are objected to because of the following informalities: minor typographical[§] grammatical errors.

In claims 5, 13, 16, and 24, the use of the asterisk * should be replaced with an “x” such that the limitation in claim 13 would read “between 7.5 and 8.8 x 10⁻⁶/K”.

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In claims 10-12 and 21-23 the Examiner recommends changing the claim language to remove the phrase “used for producing.” For example claim 10 would be clear if it read as follows:

10. A borosilicate glass according to claim 9 wherein the glass is an UV cut-off filter in either the UVB or UVC range.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

As with the specification portion of the application, the claims refer to the “edge . situation” it is not completely clear to the Examiner what this referring to. The Examiner has treated the term “situation” to be synonymous with cut-off or absorption during examination.

Claims 2, 3, and 14 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Dependent claim 2 is rendered indefinite since the TiO₂ range is broader than the range in independent claim 1. Claim 1 recites TiO₂ as a required component where claim 2 allows no TiO₂ to be present, thus rendering claim 2 indefinite.

Claims 3 and 14 recite the phrase “a second percent by weight on a second oxide basis further includes”. The phrase renders these claims indefinite since the phrase is unclear. Furthermore, in claims 3 and 14, there is a limitation for “0.1-1% Mg”. As the recitation currently reads the limitation is toward the alkaline earth metal magnesium not the alkaline earth metal oxide MgO. As indicated above the specification fails to provide proper antecedent basis

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for the claimed subject matter in terms of SrO and Mg as well as the alkaline earth metal oxide MgO.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-9, 13-20, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kokubu et al., U.S. Patent 4,665,039.

Kokubu et al. teach a glass having overlapping ranges of components with instant claims 1-4, 6-9, 14, 15, and 17-20. See abstract, column 2, lines 17-28.

Kokubu et al. fail to teach any examples or compositional ranges that are sufficiently specific to anticipate the compositional limitations of claims 1-4, 6-9, 14, 15, and 17-20. However, overlapping ranges have been held to establish prima facie obviousness. See MPEP 2144.05.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected from the overlapping portion of the ranges disclosed by the reference because overlapping ranges have been held to establish prima facie obviousness. See MPEP 2144.05.

One of ordinary skill in the art would expect that a glass with overlapping compositional ranges would have the properties recited in claims 5-9, 13, 16-20, and 24.

Claims 1-5, 9-16, and 20-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mennemann et al., U.S. Patent 4,562,161.

Mennemann et al. teach a glass having overlapping ranges of components with instant claims 1-4, 9, 14, 15, and 20. See abstract, column 2, lines 27-45 and column 6, lines 17-18.

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Mennemann et al. fail to teach any examples or compositional ranges that are sufficiently specific to anticipate the compositional limitations of claims 1-4, 9, 14, 15, and 20. However, overlapping ranges have been held to establish prima facie obviousness. See MPEP 2144.05.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected from the overlapping portion of the ranges disclosed by the reference because overlapping ranges have been held to establish prima facie obviousness. See MPEP 2144.05.

One of ordinary skill in the art would expect that a glass with overlapping compositional ranges would have the properties recited in claims 5, 9, 13, 16, 20, and 24.

As to claims 10-12 and 21-23, Mennemann et al. teach that the optical glass can be used as UV filters and UV lenses as well as other optical uses where a chemically durable glass is needed. See column 1, lines 25-41.

Conclusion

The additional references cited on the 892 have been cited as art of interest since they are considered to be cumulative to or less than the art relied upon in the rejections above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth A. Bolden whose telephone number is 571-272-1363. The examiner can normally be reached on 9:30 am-6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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**** Please note that the Examiner, Elizabeth A. Bolden will be out of the office for an extended period of time starting on or about 19 January 2006 and returning approximately 10 February 2006. You can leave me a voicemail message, which I will try to check intermittently, otherwise please contact my supervisor Jerry Lorengo at the above telephone number. Sorry for this inconvenience. ****

EAB

12 December 2005


**KARL GROUB
PRIMARY EXAMINER
GROUP 1755**